In the Claims:

Please amend the claims as follows.

--1 (Currently amended). A transmission frame for transporting information in a plurality of interconnected communication networks including a plurality of communication nodes, wherein an originating node of said transmission frame belongs to a home network corresponding to one of said plurality of interconnected communications networks, said frame comprising:

a message field containing message information; and

a plurality of destination node addresses to facilitate transmission of said frame to different destination nodes, wherein each destination node address identifies ~~identifying~~ a different final destination in the plurality of interconnected communication networks to receive said frame transmitted by said originating node, and wherein said frame supports said destination node addresses in the form of local home network addresses and extended network addresses indicating networks other than said home network ~~to facilitate transmission of said frame to different destination nodes~~;

an extended network identifier selectively included within said frame for said destination node addresses to identify a network for a corresponding destination node address other than said home network of said originating node to which to send the message information; and

an extended address indicator indicating the presence of said extended network identifier for corresponding destination node addresses.

2 (Original). The transmission frame of claim 1, further comprising an originator's address

identifying an originator of the message information.

3 (Original). The transmission frame of claim 1, further comprising a maximum hop indicator indicating a maximum number of transmissions of the message information to reach one of the destination nodes.

4 (Original). The transmission frame of claim 1, further comprising a precedence indicator indicating a level of priority for scheduling transmission of the message information across the interconnected networks.

5 (Original). The transmission frame of claim 1, further comprising a security indicator indicating a level of security for the message.

6 (Original). The transmission frame of claim 1, further comprising a message delivery status indicator associated with one of the plurality of addresses indicating if the message information was sent to said address.

7 (Original). The transmission frame of claim 1, wherein at least one of the plurality of addresses comprises a home network identifier and an identifier of a terminal device within the home network.

8 (Canceled).

9 (Canceled).

10 (Currently amended). The transmission frame of claim 1, ~~A transmission frame for transporting information in a plurality of interconnected communication networks including a plurality of communication nodes, comprising:~~

~~a message field containing message information;~~

~~a plurality of addresses identifying a plurality of destination nodes in the plurality of interconnected communication networks; and~~

further comprising a user-defined indicator for use by an application layer process.

11 (Currently amended). The transmission frame of claim 1, ~~A transmission frame for transporting information in a plurality of interconnected communication networks including a plurality of communication nodes, comprising:~~

~~a message field containing message information;~~

~~a plurality of addresses identifying a plurality of destination nodes in the plurality of interconnected communication networks; and~~

further comprising an end of routing indicator identifying the last of the plurality of addresses in the transmission frame.

12 (Original). The transmission frame of claim 1, further comprising an acknowledgement indicator indicating a disposition of the message information.

13 (Original). The transmission frame of claim 12, wherein the acknowledgement indicator indicates that the message information is received by a user at one of the plurality of addresses.

14 (Original). The transmission frame of claim 12, wherein the acknowledgement indicator indicates that the message information is read at one of the plurality of addresses.

15 (Currently amended). The transmission frame of claim 12, ~~A transmission frame for transporting information in a plurality of interconnected communication networks including a plurality of communication nodes, comprising:~~

~~a message field containing message information;~~

~~a plurality of addresses identifying a plurality of destination nodes in the plurality of interconnected communication networks; and~~

~~an acknowledgement indicator indicating a disposition of the message information,~~ wherein the acknowledgement indicator indicates that the message information is printed at one of the plurality of addresses.

16 (Currently amended). The transmission frame of claim ~~8~~ 1, wherein ~~the terminal device~~ at least one destination node is a radio.

17 (Currently amended). A method of routing a message addressed to a plurality of addressees among a plurality of interconnected communication networks having a plurality of

communication nodes, wherein the message is included within a transmission frame having a header containing the plurality of addresses, and the transmission frame is located at one of the plurality of communication nodes, the method comprising:

determining if any of the plurality of addresses contained in the header corresponds to a device serviced by the communication node; ~~and~~

determining a routing disposition for the plurality of addresses contained in the header that do not correspond to the device serviced by the communication node;

generating a new header containing addresses among the plurality of addresses determined not to correspond to the device serviced by the communication node and that have the same routing disposition; and

transmitting a new transmission frame containing the message and the new header, according to the determined routing disposition for the addresses contained in the new header.

18 (Canceled).

19 (Currently amended). ~~The method of claim 17, wherein a delivery indicator is associated with each of the plurality of addresses,~~ A method of routing a message addressed to a plurality of addressees among a plurality of interconnected communication networks having a plurality of communication nodes, wherein the message is included within a transmission frame having a header containing the plurality of addresses each associated with a corresponding delivery indicator, and the transmission frame is located at one of the plurality of communication nodes, the method ~~further~~ comprising:

determining if any of the plurality of addresses contained in the header corresponds to a device serviced by the communication node;

determining a routing disposition for the plurality of addresses contained in the header that do not correspond to the device serviced by the communication node;

setting the delivery indicator of an address to which the message is delivered; and

transmitting the transmission frame according to the determined routing disposition for the addresses with delivery indicators not set.

20 (Original). The method of claim 17, wherein the routing disposition is determined according to routing information available at the communication node.

21 (Previously presented). The method of claim 17, wherein the routing disposition for the plurality of addresses is determined only for the plurality of addresses to which the message has not been sent.

22 (Original). The method of claim 21, wherein the header contains information indicating to which of the plurality of addresses the message has been sent.

23 (Currently amended). A communications node in a network interconnected with a plurality of communication networks, the communications node routing a message addressed to a plurality of addressees, the message being contained in a transmission frame that includes a header containing the plurality of addresses, the communications node comprising:

means for examining the plurality of addresses in the header;

means for sending the message to a terminal device within the network containing the communication node if one of the plurality of addresses in the header corresponds to the terminal device;

means for determining a routing disposition for the plurality of addresses in the header that do not correspond to the terminal device; ~~and~~

means for generating a new header containing addresses among the plurality of addresses determined not to correspond to the terminal device and that have the same routing disposition; and

means for transmitting a new transmission frame containing the message and the new header, according to the determined routing disposition for the addresses contained in the new header

~~means for sending the message to addresses having the same routing disposition~~.

24 (Original). The communication node of claim 23, wherein the means for sending the message to the terminal device is a radio transmitter.

25 (Original). The communication node of claim 23, wherein the means for determining a routing disposition is a network router with a routing table.

26 (Currently amended). A communication node in a home network interconnected with a plurality of communication networks, for processing a transmission frame having a message and a header containing a plurality of destination addresses, the communication node comprising:

a home network routing table having recorded therein addresses of terminals in the home

network;

an internetwork routing table having recorded therein routing information for routing messages destined for at least one of the plurality of networks; ~~and~~

a router, coupled to the home network routing table and the internetwork routing table, the router identifying as a home address an address among the plurality of destination addresses in the header that is present in the home network routing table, and determining a routing disposition for addresses among the plurality of destination addresses that are not present in the home network routing table, wherein the routing disposition is determined based on the routing information recorded in the internetwork routing table; and

a transmitter, coupled to the router, sending the message to terminals in the home network having addresses identified by the router as home addresses, generating a new transmission frame including the message and the addresses having the same routing disposition determined by the router, and outputting the new transmission frame in accordance with the routing disposition.

27 (Currently amended). ~~The communication node of claim 26,~~ A communication node in a home network interconnected with a plurality of communication networks, for processing a transmission frame having a message and a header containing a plurality of destination addresses, the communication node comprising:

a home network routing table having recorded therein addresses of terminals in the home network;

an internetwork routing table having recorded therein routing information for routing messages destined for at least one of the plurality of networks; and

a router, coupled to the home network routing table and the internetwork routing table, the router identifying as a home address an address among the plurality of destination addresses in the header that is present in the home network routing table, and determining a routing disposition for addresses among the plurality of destination addresses that are not present in the home network routing table, wherein the routing disposition is determined based on the routing information recorded in the internetwork routing table;

wherein each of the plurality of destination addresses in the header has a delivery indicator indicating if the message has been sent toward the corresponding destination address, the communication node further comprising a transmitter, coupled to the router, sending the message to a terminal in the home network having an address identified by the router as a home address, setting the delivery indicator for the address identified as a home network address, and in accordance with the routing disposition sending the message to addresses in the header that do not have delivery indicators set.

28 (Canceled).

29 (Currently amended). The communication node of claim ~~28~~ 26, wherein the communication node is included in a radio.

30 (Currently amended). An originating terminal in a plurality of interconnected communication networks, wherein said originating terminal belongs to a home network corresponding to one of said plurality of interconnected communications networks, the originating

terminal comprising:

a message generation device generating a message for delivery to a plurality of destination terminals in the interconnected networks each serving as a final destination for the message;

a network interface device coupled to the message generation device, and in response to receiving the message, generating a transmission frame having a message and a header including: ~~containing~~ addresses each identifying a different one of the plurality of destination terminals to receive said message, wherein said header supports said addresses in the form of local home network addresses and extended network addresses indicating networks other than said home network; an extended network identifier selectively included within said header for said addresses to identify a network for a corresponding destination terminal other than said home network of said originating terminal to which to send the message information; and an extended address indicator indicating the presence of said extended network identifier for corresponding addresses; and

a transmitter coupled to the network interface device, transmitting the transmission frame to a communication node in one of the interconnected networks for routing to each of the different destination terminals identified by said addresses.

31 (Currently amended). A method of generating a message addressed to a plurality of terminals among a plurality of interconnected communication networks, wherein an originating terminal of said message belongs to a home network corresponding to one of said plurality of interconnected communications networks, the method comprising:

generating a message for delivery to the terminals each serving as a final destination for the message;

generating a header including: ~~containing~~ a plurality of addresses each identifying a different one of the terminals to receive the message, wherein said header supports said addresses in the form of local home network addresses and extended network addresses indicating networks other than said home network; an extended network identifier selectively included within said header for said addresses to identify a network for a corresponding destination terminal other than said home network of said originating terminal to which to send the message information; and an extended address indicator indicating the presence of said extended network identifier for corresponding addresses; and

transmitting a transmission frame including the header and the message to a communication node among the plurality of communication networks for routing to each of the different addressed terminals.

32 (Currently amended). The method of claim 31, wherein generating the header includes generating ~~one of~~ the plurality of addresses having ~~a basic~~ said local home network address identifying a terminal within one of the plurality of interconnected networks, and ~~an~~ said extended network address identifying said one of the plurality of interconnected networks containing said terminal.

33 (Currently amended). A program product apparatus including a computer-readable medium with computer program logic recorded thereon, comprising:

program instructions for examining a header of a transmission frame, the header containing addresses of a plurality of destination terminals among a plurality of interconnected communication

networks;

program instructions for determining if any of the addresses contained in the header corresponds to a terminal connected to a home network, wherein an address for the terminal connected to the home network is recorded in a home network routing table;

program instructions for determining a routing disposition for the addresses in the header that do not correspond to a terminal in the home network; ~~and~~

~~program instructions for sending the transmission frame to addresses having the same routing disposition~~

program instructions for generating a new header containing addresses among the plurality of addresses determined not to correspond to the terminal and that have the same routing disposition; and

program instructions for transmitting a new transmission frame containing the message and the new header, according to the determined routing disposition for the addresses contained in the new header.

34 (Currently amended). A method of receiving a message within a plurality of interconnected communications networks, the message being transmitted by an originating node in a plurality of frames, wherein said originating node belongs to a home network corresponding to one of said plurality of interconnected communications networks ~~each frame having a frame sequence number, an originator's address, and a plurality destination addresses~~, the method comprising:

receiving and storing a first message frame transmitted by said originating node at a receiving node within said interconnected communications networks, wherein each message frame

includes: a frame sequence number; an originator's address; a plurality of destination addresses, wherein said message frame supports said addresses in the form of local home network addresses and extended network addresses indicating networks other than said home network; an extended network identifier selectively included within said frame for said addresses to identify a network for a corresponding destination other than said home network of said originating node to which to send the message information; and an extended address indicator indicating the presence of said extended network identifier for corresponding addresses;

receiving a second message frame at said receiving node;

~~determining if~~ comparing an originator's address in the second frame ~~matches~~ with an originator's address in the first frame; and

ordering the first and second frames based on the frame sequence numbers in the first and second frames in response to the first and second frames including the same originator's address.

35 (Original). The method of claim 34, wherein each frame of the message includes a delivery indicator associated with each of the destination addresses, the method further comprising setting the delivery indicator of one of the destination addresses if the frame is delivered to said destination address.

36 (Original). The method of claim 34, further comprising determining if one or more frames of the message are not received at a destination address, and requesting retransmission of only those frames.

37 (Original). The method of claim 36, wherein the determining if a frame of a message is not received and requesting retransmission of the frame is performed in a transport layer of a set of communication protocols.--